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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/003,465      | 12/06/2001  | Stephen J. Cutler    | 43257               | 5845             |

1609 7590 05/05/2003

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EXAMINER

PRYOR, ALTON NATHANIEL

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1616

DATE MAILED: 05/05/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/003,465

Applicant(s)  
Cutler et al

Examiner  
Alton Pryor

Art Unit  
1616



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Sep 6, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-31 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9, 11, and 18-24 is/are rejected.
- 7) ☒ Claim(s) 3, 10, 12-17, 25, and 26 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4,5 6) ☐ Other:

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***Claim Rejections under 35 U.S.C. 102(b)***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,4,6-9,18,19 are rejected under 35 U.S.C. 102(b) as being anticipated by Osei-Gyimah et al (US 5288693; 2/22/94). Osei-Gyimah teaches a method of killing bacteria and fungi comprising applying 500 ppm of a derivative of 1,4-benzoquinone compound to industrial cooling water. See column 7 lines 16-26, column 9 lines 15- 27, column 10 lines 15-28, column 10 lines 39-53, claims 1,5-7:

3. Claims 1,2,5,7,11, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein et al (US 4238484; 12/9/80). Stein teaches a method of killing snails and mollusks (mussels) comprising applying 0.0125 ppm of a derivative of 1,4-benzoquinone compound to a river, pond, or canal. See column 2 lines 16-26, column 4 line 64 - column 5 line 25, claims 1,3-5.

***Claim Rejection under 35 U.S.C. 103(a)***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osei-Gyimah above as applied to claims 1,2,4,6-9,18,19. See Osei-Gyimah 35 U.S.C. 102(b) rejection above. Osei-Gyimah teaches all that is recited by claims 20-24 except for 200, 300 ppm of the 1,4 benzoquinone derivative being applied to industrial water and the exposure time of the compound to the industrial water. Note that Osei-Gyimah does teach ppm levels of 1,4-benzoquinone derivative being applied to the water. Therefore it would have been obvious to one having ordinary skill to apply 200, 300 ppm of the 1,4-benzoquinone derivative to the industrial water to kill fungi and bacteria. It would have been obvious to one having ordinary skill in the art to determine the optimum time range to expose the industrial water to the 1,4-benzoquinone derivative. One would have been motivated to do this in order to kill bacteria and fungi.

Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stein et al above as applied to claims 1,2,5,7,11,18-20. See Stein 35 U.S.C. 102(b) rejection above. Stein teaches all that is recited by claims 21-24 except for 1-200 ppm of the 1,4 benzoquinone derivative being applied to the river, pond or canal and the exposure time of the compound to the river, pond or canal. Note that Stein does teach less than 1 ppm levels of 1,4-benzoquinone derivative being applied to the water. Therefore it would have been obvious to one having ordinary skill to apply 1 ppm of the 1,4-benzoquinone derivative to the river, pond or canal to kill snails and mollusks. It would have been obvious to one having ordinary skill in the art to determine the optimum time range to expose the river, pond, or canal to the 1,4-benzoquinone derivative. One would have been motivated to do this in order to kill snails and mollusks.

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***Claim Objection / Allowable Subject Matter***

Claims 3,10,12-17,25,26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach or suggest a method comprising the pests of claim 3,10,12-14. The prior art does not teach or suggest the method comprising the 1,4-benzoquinone compounds of claims 15-17. Claims 27-31 are allowable. The prior art does not teach or suggest the instant method of killing mollusk pests with the instant 1,4-benzoquinone compounds of claims 27-31.

***Election***

The election of the instant method comprising 1,4-benzoquinone is allowable. The search has been extended beyond the election.

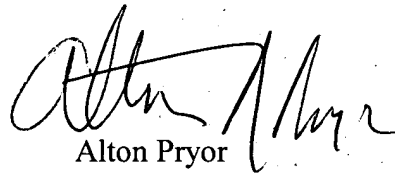
***Telephonic Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton Pryor whose telephone number is (703) 308-4691. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose Dees, can be reached on (703) 308-4628. The fax phone number for this Group is (703) 308-4556.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

A handwritten signature in black ink, appearing to read "Alton Pryor", is written over the printed name.

Alton Pryor

Primary Examiner, AU 1616

5/4/03